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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,041	01/20/2004	Joe William Heathcott	CDI 30	1194

27297 7590 10/17/2006

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HOUSTON, TX 77084

EXAMINER

PICKARD, ALISON K

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,041

Applicant(s)

HEATHCOTT ET AL.

Examiner

Alison K. Pickard

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. It appears that "a second lip profile" in the second to last line of claim 9, and third to last lines of 15 and 20, should be --the-- second lip profile.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler (4,526,385) in view of Iverson (4,685,685).

Wheeler discloses a seal 40 (fig. 6) comprising a u-shaped body with an inner wall, outer wall, and seat. As seen in Figure 6, the outer wall has an extended length. The walls are parallel to the axis and the seat is perpendicular to the walls. The seal has an open, asymmetrical u-shaped channel 45. The inner diameter has a composite dynamic seal/wear surface of PTFE 44. The outer diameter forms a static seal at the outer surface of the outer wall and seat. And the seal includes a first radially extending lip 42 on the inner diameter of the inner wall and a second radially extending lip on the outer diameter of the outer wall. Wheeler discloses an expander 28 in the channel. However, Wheeler does not disclose a plurality of ribs within the channel. Iverson teaches a seal with groove, seat, and legs. Iverson teaches using plural ribs within the channel instead of an elastic expander to accommodate a large range of uniform expansion and compression. Therefore, it would have been obvious for one of ordinary skill in the art at the

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time the invention was made to modify the seal of Wheeler with the ribs taught by Iverson to accommodate a large range of uniform expansion and compression.

Regarding claims 11-14, 17-19, and 22-24, Wheeler does not disclose that the PTFE is a filled PTFE or that the composite is aramid fiber filled HNBR. The selection of a known material based on its suitability for its intended use is not considered inventive. See *In re Leshin*, 125 USPQ 416 (CCPA 1960). Further, it is known to use these materials as evidenced by Schofield, Keifer, Atkinson, and Sakakibara. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use any of the claimed materials as the wear surface.

Response to Arguments

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Wheeler's figure 6 discloses the u-shaped seal with different length legs and projecting lips as required by the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 571-272-7062.

The examiner can normally be reached on M-F (10-7:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

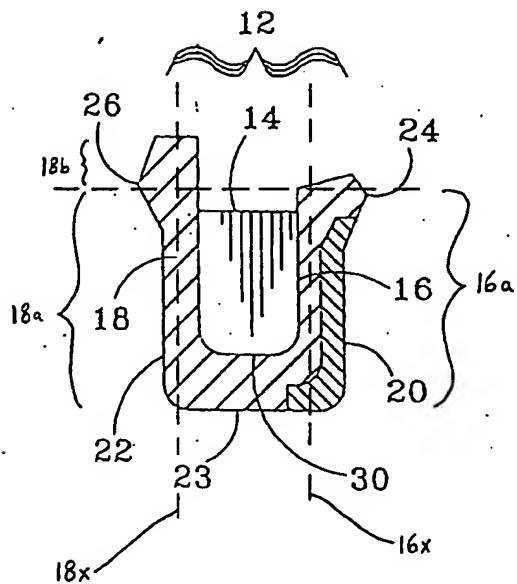
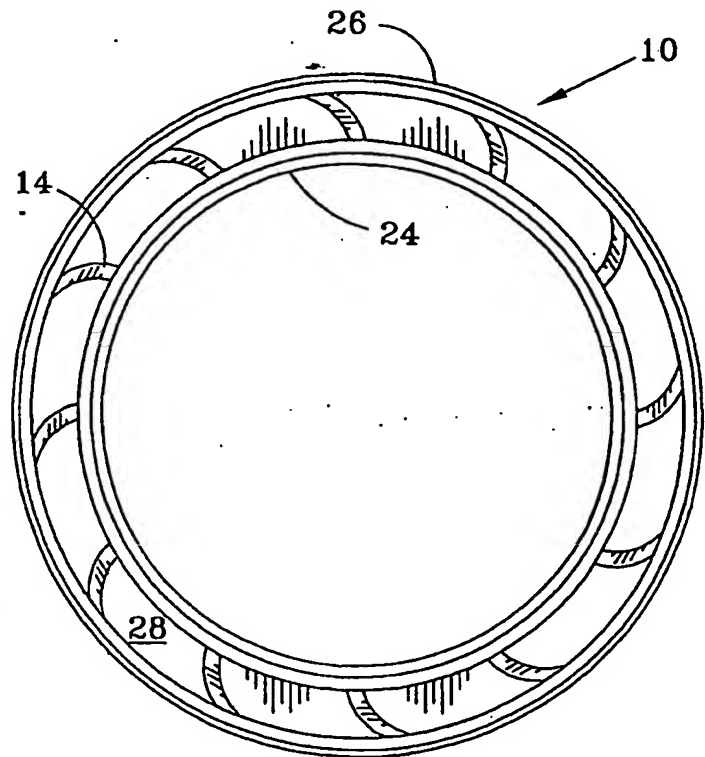
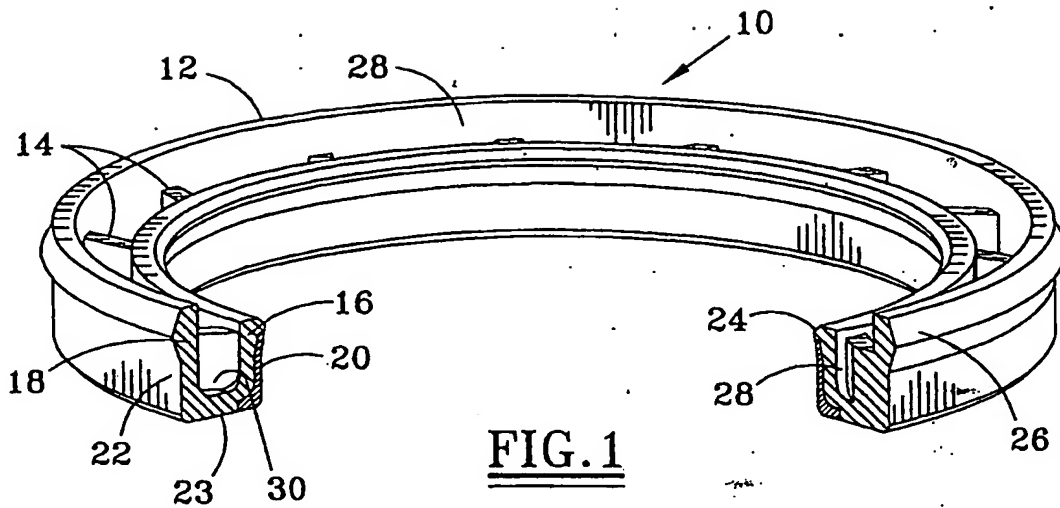


Alison K. Pickard
Primary Examiner
Art Unit 3673

AP



REPLACEMENT SHEET



OK, AP 10-12-06